

Goss,¹ on the contrary, in his excellent account of the habits of this species, describes its call as a "loud and hoarse *ho-hoo*," and adds: "Sometimes the same syllables are heard, in a much lower tone, as if proceeding from the depth of the throat." The account of so careful an observer is not to be questioned, and it is quite probable that the notes of the Jamaican bird differ markedly from those of the birds which inhabit Trinidad.

It seems little short of murder to kill one of these birds. Certainly to shoot a calling bird was out of the question. Our single specimen was shot as he sailed by one evening near the stub where our first observations were made. He was wing-tipped and before sacrificing him to the cause of science we secured the photograph from which the illustration (Pl. III) accompanying this article was drawn.

LIST OF BIRDS OBSERVED IN THE VICINITY OF
FORT KEOGH, MONTANA, FROM JULY, 1888,
TO SEPTEMBER, 1892.

BY CAPT. PLATTE M. THORNE, U. S. A.

FORT KEOGH, on the right bank of the Yellowstone, has an altitude of 2365 feet. The river bottom has an average width of two miles, and has in parts a small and obscurely defined second bench. River sand is reached at an average depth of six feet in the higher parts. Tongue River empties into the Yellowstone two miles to the north. Both rivers are rapid, and the only still water is an irregular, reedy pond fed by springs and about three-fourths of a mile long. This pond goes dry in summer some years and remains so during the winter. The growth of cottonwood along both rivers is in places heavy, some trees showing great age. Wild rose bushes grow luxuriantly on the moister

¹Birds of Jamaica, p. 42.

parts near the rivers, and there are some small willows. The left bank of the river is high bluff, back of which is elevated rolling prairie. Outside the river valley the country is all prairie or 'Bad Lands.'

No species is included in the following list that I have not seen, and nearly all, except very large birds, are in my collection.

1. *Colymbus nigricollis californicus*.—Rare. Two June 3, 1889; one May 14, 1892.

Larus sp.?—A few large and a few small Gulls; one seen each year, but I have never been able to kill any.

2. *Merganser americanus*.—Saw one at a taxidermist's in Miles City, Montana, who said it was killed here late in October, 1889.

3. *Merganser serrator*.—Rare. One female, April 27, 1889.

4. *Lophodytes cucullatus*.—Not common. From June 14 to July 17, 1889, about twenty were seen daily. At the latter date the pond they frequented became dry.

5. *Anas boschas*.—Common in spring and fall; a few seen occasionally during summer.

6. *Anas strepera*.—Not common. Transient.

7. *Anas americana*.—Not common. Transient.

8. *Anas carolinensis*.—Common. Must breed to some extent, as a few remain all summer.

9. *Anas discors*.—Common. Transient.

10. *Spatula clypeata*.—Common. A few remain all summer.

11. *Dafila acuta*.—Common. Transient.

12. *Aythya americana*.—Not common. A few single birds and pairs. Transient.

13. *Aythya affinis*.—Rare. Two, March, 1889; no others.

14. *Glaucionetta clangula americana*.—Rare. Flock of ten seen April 17, 1889. No others observed.

15. *Charitonetta albeola*.—Rare. A few in fall; not seen in spring.

16. *Erismatura rubida*.—Rare. A flock of about forty observed April 21, 1889. No others seen. Two of the males killed were in almost perfect breeding plumage.¹ The movements of this Duck seem very erratic. During the five and a half years I was stationed at Fort Lyon, Colorado, I saw them but twice, viz., a flock of about fifty in March, 1883, and a flock of twenty-five in March, 1886. In southwestern Texas, in the fall, I often found them abundant on one day and none at all the next.

17. *Chen rossii*.—Rare. One female killed April 25, 1892. It was alone and much emaciated.

¹ Many Ducks called 'transient' would probably be found to breed here if there were suitable nesting places.

18. *Branta canadensis*.—Common in large flocks in spring and fall, am not certain they were all this species, but all that I killed were. Old inhabitants say they formerly nested to some extent in trees.

19. *Ardea herodias*.—Common in spring and fall and some remain in summer that I think breed.

20. *Rallus virginianus*.—Rare. One male killed August 10, 1888. This is the only one I am certain of as Soras are found where this was taken.

21. *Porzana carolina*.—Common. Breeds. Took a young one July 8, 1889. The down was mostly replaced by feathers but hairy filaments remained.

22. *Fulica americana*.—Common. Breeds.

23. *Phalaropus lobatus*.—Rare. Four were seen June 18, 1889. Two of those killed were females with ova smaller than No. 12 shot. This would seem a late date for this bird to be found here.

24. *Phalaropus tricolor*.—Tolerably common in May and June. A description of three at play as seen by me was published in 'The Auk,' Vol. VI, p. 336.

25. *Recurvirostra americana*.—Rare. A few in spring.

26. *Gallinago delicata*.—Rare. Am satisfied I saw this bird in the spring of 1889, but I did not take any specimens.

27. *Tringa bairdii*.—Rare. A few in spring.

28. *Tringa minutilla*.—Common in spring. A few in fall.

29. *Ereunetes pusillus*.—Common in spring. A few in fall.

30. *Totanus melanoleucus*.—Common in spring. A few in fall.

31. *Totanus flavipes*.—Common in spring and fall. A few remain so late that I think they breed.

32. *Totanus solitarius*.—Rather rare. A few may breed.

33. *Symphemia semipalmata inornata*.—Rather rare in spring. About twelve seen in all.

34. *Bartramia longicauda*.—Common. Seen in flocks in this valley in spring. Breeds quite commonly on the elevated prairie.

35. *Actitis macularia*.—Rare. Three seen in all.

36. *Numenius longirostris*.—Common. In flocks in spring. Breeds on elevated prairie.

37. *Ægialitis vocifera*.—Abundant in spring. Flocks seen containing hundreds. Not common in fall. If it breeds it must be very sparingly.

38. *Ægialitis montana*.—Rather rare. A few scattering birds in spring and summer.

39. *Pediocætes phasianellus campestris*.—Common. Have had no opportunity to compare them with other Sharp-tails. They seem to frequent the vicinity of trees and bushes more than the Dakota birds. During the last three years they have almost entirely ceased coming into the river bottoms in cold weather and instead seek shelter among the pines on the divides. I have found them abundant in December on the high divide between Powder and Tongue Rivers. The great number that used to be killed in the river bottoms in winter may have driven

them to seek other shelter. Their food in winter seems to consist chiefly of the berries of the wild rose.

40. *Centrocercus urophasianus*.—Common. Different coveys were found mixed when the young were two-thirds grown. In April, 1891, I watched two pairs for some time at a short distance from me. The males had their air-sacks inflated and feathers ruffled, showing more white than would seem possible, and looking very large. They spread their tails, dragged their wings and strutted very much as a domestic Turkey Gobbler does. Their peculiar tail gave the performance a ridiculous appearance. Capt. Bendire, U. S. A., writes me that he once observed similar actions.

41. *Zenaida macroura*.—Common. Have known two broods to be hatched in one nest during the season.

42. *Cathartes aura*.—Rare. Twelve seen in June, 1889.

43. *Circus hudsonius*.—Common. Breeds.

44. *Buteo swainsoni*.—Rare. Have seen only two that I am certain of.

45. *Aquila chrysaetos*.—Rare. One, apparently two years old, seen in December, 1889. Two young were taken in the Bad Lands in 1889. One of these was kept in a cage at the Fort for about a year.

46. *Falco richardsonii*.—Rare. Two taken in the fall of 1889.

47. *Falco sparverius*.—Common. Breeds. I have never been in a country where Hawks are as scarce as they are here.

48. *Asio wilsonianus*.—Rare. Three seen.

49. *Asio accipitrinus*.—Rare. Two seen.

50. *Megascops asio?*—Rare. Three seen. None taken.

51. *Bubo virginianus subarcticus*.—Common. Some breed.

52. *Nyctea nyctea*.—Usually rare. In the winter of 1889-90 eighteen were seen or reliably reported. They seemed to come in advance of the intense cold that set in December 31, 1889, and lasted twenty-four days. The last was seen February 4, 1890. The Cheyenne Indians say none had been seen since "The-bad-cow-year" (winter of 1886-87). They call it "Wo-com-mis-ta" (Owl white). I also saw one in the winter of 1890-91 and heard of four more. All I examined were fat. None attempted to alight on trees.

53. *Speotyto cunicularia hypogæa*.—Common, but scarcer than usual at other localities when they are found. There are large old prairie dog towns but very few prairie dogs.

54. *Coccyzus erythrophthalmus*.—Rare. One female taken June 27, 1889. The largest ova were of the size of BB shot. One male taken July 24, 1889.

55. *Ceryle alcyon*.—Common. Not seen on this part of the Yellowstone, owing probably to the color of the water, but found on upper Tongue River and Lame Deer Creek.

56. *Dryobates villosus leucomelas?*—Rare.

57. *Dryobates pubescens*.—Rather common. About as many in winter as in summer. Think it breeds.

58. *Melanerpes erythrocephalus*.—Common. Breeds.
59. *Colaptes cafer*.—Common. Breeds. Sent twenty-five skins to Dr. J. A. Allen, American Museum of Natural History, New York City. He writes me of them: "The series as a whole is one of special interest, the specimens all coming from localities within the range of the interbreeding of *C. auratus* and *C. cafer*. There is not a specimen in the whole series that is strictly *C. cafer*, though several approach true *cafer* very strongly. The greater part are much more *cafer* than *auratus*. In a few the characters of the two species are about equally represented. In one or two the *auratus* characters prevail. No two specimens are quite alike, while the combination of characters is often peculiar and very interesting."
60. *Chordeiles virginianus henryi*.—Common. Breeds.
61. *Tyrannus tyrannus*.—Common. Breeds. Not as numerous as *T. verticalis*.
62. *Tyrannus verticalis*.—Abundant. Breeds. For six successive summers a pair repaired and used a nest in a tree close to my quarters.
63. *Sayornis saya*.—Common. Breeds. Nests under eaves of buildings about the Fort and under sandstone rocks in the Bad Lands.
64. *Contopus richardsonii*.—Common. Breeds.
65. *Empidonax pusillus*.—One specimen, June 8.
66. *Empidonax minimus*.—Not common. Taken as late as May 31.
67. *Empidonax hammondi*.—Two specimens,—an adult July 17, and a young bird June 8.
68. *Otocoris alpestris arenicola*.—Abundant. Must breed here, but I have never found a nest. They are present in varying numbers the entire year. In the fall of 1889 I sent one hundred and eighteen skins of birds taken every month in the year to the American Museum of Natural History, New York. They were examined by Mr. Jonathan Dwight, Jr. and pronounced to be "all *arenicola*."
69. *Pica pica hudsonica*.—Common. Breeds. Some seen throughout the year.
70. *Corvus corax sinuatus*.—Not common.
71. *Corvus americanus*.—Not common. A small flock sometimes seen at the Fort garbage dump. More common at Tongue River Agency, Lama Deer, Montana. About as many in winter as in summer.
72. *Molothrus ater*.—Abundant. Breeds. Nests on the ground seem to be preferred as the receptacle of its eggs.
73. *Xanthocephalus xanthocephalus*.—Abundant in suitable localities. Breeds. As to the males flocking by themselves in the breeding season, I can only say that on June 18, 1889, I saw a flock of about seventy-five some half a mile from their nesting place and could not see a female among them.
74. *Agelaius phœniceus*.—Common. Breeds. I have found their nests within a foot from those of the Yellow-headed Blackbird. No signs of quarrelling between the two kinds.
75. *Sturnella magna neglecta*.—Abundant; breeds. Common by the middle of April and many stay until near the last of October.

76. *Icterus bullocki*.—Common. Breeds.
77. *Scolecophagus cyanocephalus*.—Abundant in spring and fall. Do not think they breed.
78. *Quiscalus quiscula æneus*.—Abundant. Breeds. This is the worst foe to the eggs and young of other birds to be found here. Have often seen them rifling nests. They appear never to eat the eggs at the nest but thrust their bills into the eggs and fly off with them. A Wren or a Summer Yellow-bird can repel a single one. Have seen as many as twenty combine to rob an Oriole's nest.
79. *Coccothraustes vespertinus*.—Rare. Saw three at Tongue River Agency, Lame Deer, Montana, April 26, 1891. One female had ova just visible without a glass.
80. *Loxia curvirostra minor*.—Rare. Not found at Fort Keogh. Took six and saw six others at Lame Deer, Montana, in May, 1891. The condition of the ova showed that it was not near the breeding period. Lame Deer has quite a high altitude and the hills are covered with pine trees.
81. *Leucosticte tephrocotis*.—Abundant in winter. Arrive by November 6 or 7 and remain here in varying numbers until the last of March. They are fond of oats and the mule corral is their favorite place. When it is cold and stormy they gather into the Post by thousands. If a warm day comes, especially if the ground is bare, few are to be seen, and where they go at these times I do not know, as I never find them about the country. They are often seen sheltering themselves in the old nests of Cliff Swallows. They are exceedingly restless birds.
82. *Leucosticte tephrocotis littoralis*.—Common in winter. Found in flocks with the last in about the proportion of one in twenty. They are among the first birds to arrive and the last to depart. Mr. Robert Ridgway wrote me March 6, 1889, that Fort Custer, Montana, was the most eastern point from which they had been previously reported.
83. *Acanthis linaria*.—Abundant during the winter of 1888-89, arriving November 7 and remaining until the middle of February. A few small flocks were seen other winters. I took a pretty large number thinking I might find *A. h. exilipes* among them, but although there is a good deal of variation in the size, markings and plumage of my specimens, I do not think I have taken it.
84. *Spinus tristis*.—Common. Breeds.
85. *Plectrophenax nivalis*.—Abundant during the winter of 1889-90. None seen other winters. Arrived November 14. Most abundant the middle of February. Last seen March 17. An old teamster told me he had seen them here before but could not tell what year.
86. *Rhynchophanes mccownii*.—Usually not common. A few small flocks are seen in spring, and some few birds remain in summer which I think breed here. At Stoneville, Montana, on the Little Missouri River, from September 4 to September 11, 1889, immense flocks were seen daily.
87. *Poocætes gramineus confinis*.—Common. Breeds.
88. *Ammodramus sandwichensis alaudinus*.—Common. Breeds. Is rare in the latter part of May and during June. Common in July. First

juveniles taken July 23. Some specimens examined by Mr. William Brewster he reports as "perhaps approaching *A. sandwichensis*."

89. *Chondestes grammacus strigatus*.—Common. Breeds.

90. *Zonotrichia querula*.—Not common. Seen only in the fall of 1889 (September 22 to October 13). All I took were juveniles.

91. *Zonotrichia leucophrys*.—Not common. Mostly seen in spring, a few in fall.

92. *Zonotrichia leucophrys intermedia*.—Tolerably common in spring and fall.

93. *Spizella monticola ochracea*.—Usually abundant during the colder months. The winter of 1889–90 was an exception, as none were seen in December, January and February. The dates of their arrivals and departures vary fully a month in different years.

94. *Spizella socialis arizonæ*.—Common. Breeds. Found also in the pine region at Lame Deer, Montana. Mr. Brewster says my Colorado specimens are "not typical"; these appear to be the same as the Colorado specimens.

95. *Spizella pallida*.—Common. Breeds. They seem to disappear about May 22 and are not seen again until the middle of July, when juveniles are taken. The year 1888 was an exception to this, adults being seen throughout May, June and July.

96. *Spizella breweri*.—Common. Breeds. Nests with eggs found by June 16.

97. *Junco hyemalis*.—Not common. Breeds. At Lame Deer, Montana, more common; found there in May, June and July.

98. *Melospiza fasciata*.—Rare. One female taken April 17, 1889.

99. *Melospiza lincolni*.—Rare. One male May 6; one female May 10, 1889. No others recognized.

100. *Pipilo maculatus arcticus*.—Common. Breeds.

101. *Habia melanocephala*.—Tolerably common. Breeds.

102. *Passerina amœna*. Rare. Five seen, none taken.

103. *Calamospiza melanocorys*.—Abundant. Breeds.

104. *Petrochelidon lunifrons*.—Abundant. Breeds. Large colonies formerly built under cliffs in the Bad Lands, as is shown by the remains of their old nests. All now nest about buildings.

105. *Chelidon erythrogaster*.—Common. Breeds.

106. *Tachycineta bicolor*.—Tolerably common. Some pairs nest in the Post.

107. *Clivicola riparia*.—I have not taken it but there is evidence that a large colony of what I believe to be this bird formerly nested in a bluff on the left bank of the river. This bluff was in range with the targets on the rifle range, which was probably the reason it was abandoned.

108. *Ampelis garrulus*.—Abundant at times in winter. Seem erratic in their movements and to vary greatly in numbers in different years. I have examined the stomachs of a good many and their food while here seems to consist almost entirely of berries of the wild rose. They open

the berries on logs and rocks and eat the inner part only. Have seen hundreds at a time at the berries and all very garrulous.

109. *Lanius borealis*.—Rare. A few seen singly during the coldest weather.

110. *Lanius ludovicianus excubitorides*.—Rare. Three seen in the summer and fall of 1892. No others.

111. *Vireo olivaceus*.—Rare. Three in spring.

112. *Vireo gilvus*.—Not common. Breeds. Have taken juveniles by July 24. Differs somewhat from my Colorado specimens identified by Mr. Brewster.

113. *Helminthophila celata*.—Common in April and May.

114. *Dendroica æstiva*.—Common. Breeds.

115. *Dendroica coronata*.—Tolerably common in spring.

116. *Dendroica striata*.—Common in May. Males observed to arrive first.

117. *Seiurus aurocapillus*.—Rare. One male in worn plumage, moulting, taken July 23, 1888.

118. *Seiurus noveboracensis notabilis*.—Rare. One juvenile taken Sept. 12, 1889. Identified by, and now in collection of Mr. William Brewster.

119. *Geothlypis trichas occidentalis*.—Rare. Four in spring.

120. *Icteria virens longicauda*.—Not common. Breeds.

121. *Sylvania pusilla*.—Rare. One male May 19, 1889.

122. *Setophaga ruticilla*.—Common. Breeds. Young taken by July 24.

123. *Anthus pensilvanicus*.—Rare. Four taken on Little Missouri at Stoneville, Montana, September, 1889.

124. *Oroscoptes montanus*.—Rare. Two on Tongue River, seventy-five miles from mouth, August, 1890. One taken was a juvenile.

125. *Galeoscoptes carolinensis*.—Common. Breeds.

126. *Harporhynchus rufus*.—Abundant. More numerous than I have seen it elsewhere.

127. *Salpinctes obsoletus*.—Common. Breeds. Found only in the Bad Lands.

128. *Thryothorus ludovicianus*.—Rare. Two in May on the divide between Powder and Tongue Rivers. One in May and two in August at Lame Deer, Montana.

129. *Troglodytes aëdon aztecus*.—Common. Breeds. Took, among others, a pair and two of their young.

130. *Sitta carolinensis aculeata*.—Rare. Saw six and took two at Lame Deer, Montana, July 11, 1892. One taken is thought to be a juvenile.

131. *Parus atricapillus septentrionalis*.—Tolerably common. Breeds in the pines at Lame Deer, Montana. Seen at the Post in winter.

132. *Regulus calendula*.—Rare. One male, September, 1889.

133. *Myadestes townsendii*.—Rare. Six were seen at Lame Deer, Montana, July 9, and one juvenile August, 1892.

134. *Turdus aliciaë*.—Rare. One female, May, 1889.

135. *Turdus ustulatus swainsonii*.— Abundant in spring, rarely seen in fall.

136. *Merula migratoria propinqua*.— Common. Breeds. Have found them common also among the pines during the breeding season, fifty miles from a house.

137. *Sialia arctica*.— Common. Breeds among the pines on the divides; rarely seen elsewhere.

AN HOUR WITH BAIRD'S AND LECONTE'S SPARROWS NEAR ST. LOUIS, MISSOURI.

BY O. WIDMANN.

RICHFIELD, St. Charles County, Missouri, is a station on the Keokuk and Northwestern R. R., forty miles northwest of St. Louis. I do not know who gave the name to the station, but presume that it was an ornithologist, since the vicinity is an exceedingly rich field for the study of birds. Oct. 13, 1894, I identified fifty-five species and added fifteen more the next day. In these two days I had gone over only a part of the ground, mainly the wooded portion, adjacent to Cuivre River and Horse Shoe Lake. The marsh had not been explored. To do this I returned on the 18th, or rather, I was on the marsh before daylight, watched the Meadowlarks, the Cedarbirds, the Robins, the Blackbirds and Ducks leave their roosting places in the marsh; and it was here at the border of Mud Lake that I found the Baird's Sparrow, two individuals, in company with other Sparrows, mainly *Ammodramus* and *Melospiza*.

Not being a 'shootist,' I cannot lay the bird before you. I have to beg you to accompany me into the field to the scene of the encounter. Mud Lake is one of a series of marsh lakes, all of which are more or less connected by sloughs and are the common receptacle of the precipitation in the surrounding country. In times of highwater in the Mississippi River the whole system is filled by backwater, pouring in through the Cuivre River and overflowing the marshes, which are on that account not cultivated, except the highest levels, forming islands in the ocean of